comprendre la relation *avant-après* si tous les temps n'existent pas également? Ce dernier cas est à la fois intangible et plus difficile; ceci explique, selon lui, la plus grande variété des versions parfois incompatibles du point de vue A. Ingthorsson le trouve malgré tout plus intéressant, justement parce qu'il offre plus de défis.

# **Références bibliographiques**

Dummett, Michael

1960 «A Defense of McTaggart's Proof of the Unreality of Time», *The Philosophical Review*, vol. 69, nº 4. p. 497–504.

McTaggart, J.M. Ellis

1908 «The Unreality of Time», Mind, vol. 17, nº 68, p. 456–473.

McTaggart, J.M. Ellis

1921 *The Nature of Existence*, vol. I, Cambridge, Cambridge University Press. McTaggart, J.M. Ellis

1927 *The Nature of Existence*, vol. II, C.D. Broad, éd., Cambridge, Cambridge University Press.

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# Facts in Logical Space: A Tractarian Ontology

JASON TURNER Oxford: Oxford University Press, 2016; 362 pp.; \$85.00 (hardcover) doi:10.1017/S0012217317000944

Appearances to the contrary, the world consists ultimately of facts, not of things. Familiar objects and properties of experience are mere abstractions from this single ontological category. So says Factualism. Jason Turner's defence of a version of this thesis is precise, exhaustive, and persuasive. Those working on facts will find much of interest, as will those working at the intersection of formal logic and metaphysics.

In Chapter 1, Turner introduces and motivates his version of Factualism (roughly): fundamental reality consists of facts arranged in logical space (11). An obvious challenge for theories such as Factualism that claim there are ultimately neither objects nor properties is reconciling this with the pervasive appearances of objects and properties in ordinary life. Turner holds that facts provide the grounds for ordinary appearances, such as 'Harry is bald' or 'Harry met Sally,' but notes that this leads to further challenges: the appearance 'Harry met Sally' and the appearance 'Harry is bald' both intuitively involve *Harry*, but Harry is no fact. Explaining exactly how facts ground, or give rise to, such patterned appearances of objects and properties is a principal part of Turner's project (23, 48). Turner's explanation relies on facts standing in external relations to other facts in 'logical space' (14, 61). Stated simply, we label facts via linguistic practices, and our labelling is sensitive to the structure of logical space. Moreover, while external relations among facts are not themselves facts, they are also not part of the Factualist ontology; rather, they are ideological commitments (22). Turner spends the next two chapters filling in the details of this explanation.

#### 638 Dialogue

In Chapter 2, Turner adds formal precision to the preceding by providing an axiomatization of external relations among facts, treating facts as points that may be connected to other points. From collections of connected points, sub-spaces of logical space are defined, e.g., Quality Spaces corresponding to appearances of properties or relations (80), and Hypersurfaces corresponding to appearances of objects (94). Turner's axiomatization is intended to provide a foundation on which to tell grounding stories. Note, Turner includes an appendix to this chapter (109) devoted to relevant formal proofs. Each subsequent chapter is similarly accompanied by a proof appendix. In Chapter 3, Turner examines several grounding stories that relate the preceding axiomatization to a language of appearances, i.e., relating facts to appearances. One approach is holistic, matching complete descriptions of appearances with complete descriptions of facts. The other two are piecemeal, matching individual appearances with individual facts. Turner proves a representation theorem holding between his axiomatization of facts and structures of objects and relations (137), and ultimately shows the holistic and piecemeal stories align (178).

Factualism fits naturally with combinatorial accounts of modality (19), and Chapter 4 is largely concerned with overcoming two standard objections to Factualism with Combinatorialism. Namely, the result: (i) entails Necessitism, i.e., for all x necessarily x exists, and (ii) is susceptible to the colour-exclusion problem, e.g., facts provide no way to account for the impossibility of something being both red and green all over. Concerning (i), Turner attempts to mitigate worries associated with Necessitism (223). Concerning (ii), Turner advocates either adopting Sarah Moss's solution to the colour-exclusion problem<sup>1</sup> or accepting primitive entailments among facts. Chapter 5 examines how names for appearances are labelled without reliance on functions, which are not facts. In effect, Turner shows how Factualism can make sense of whatever story semanticists provide for how words attach to facts (288). In Chapter 6, Turner canvasses alternative versions of Factualism thus far defended, and explores how the resources of Factualism might supplement grounding stories for metaphysical views such as Monism (317) or Ontological Nihilism (322). In Chapter 7, Turner admits despite defending Factualism, he doubts its truth (331). Comparing Factualism to a putative theory that admits objects, he sides with the latter, claiming appearances strongly suggest there are such things.

This last point deserves elaboration, as Turner perhaps does himself disservice by relying so heavily on intuitions concerning appearances when deciding between Factualism and a non-descript theory of objects. Presumably, Turner has in mind a theory of objects largely on par with Factualism with respect to most theoretical virtues, e.g., ontological parsimony (20); ideological parsimony (56); explanatory adequacy (331); etc. Of course, weighing metaphysical theories largely balanced in terms of theoretical virtues is difficult. In this case, appealing to the intuition that there are objects seems a natural way to break the tie, and indeed this intuition is what shakes Turner's faith in Factualism. However, it is not obvious that intuitions concerning appearances *should* play such a significant role in deciding between metaphysical theories otherwise on par. Clearly, such intuitions provide a compulsory starting point for theorizing, but even pervasive intuitions may be revisable. This point seems especially apt when one is engaged, as the Factualist is, in explorations of fundamental metaphysics. Moreover, even if intuitions concerning appearances are permitted to play such a significant role,

<sup>&</sup>lt;sup>1</sup> Moss, 2012, p. 845.

Factualism is not thereby worse off. Though metaphysical theories often seem to gain plausibility when they align with certain intuitions, theories which deviate may gain credibility when accompanied by plausible explanations for deviation. Admittedly, Factualism deviates from the intuition that there are objects, but Turner goes to great lengths to explain how Factualism can be reconciled with such intuitions.

In any event, absent appealing to intuitions concerning appearances of objects, comparing Factualism and an otherwise equally virtuous theory of objects leads to impasse. Whether one is justified in relying on intuitions concerning appearances as a tiebreaker, or whether one should instead accept the impasse, is an intriguing question we will not decide here. Still, it is a further value of Turner's impressively balanced defence of Factualism that it forces one to engage with just such questions.

### Reference

Moss, Sarah

2012 "Solving the Color Incompatibility Problem." Journal of Philosophical Logic 41 (5): 841–851.

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# **Panpsychism:** Contemporary Perspectives

GODEHARD BRÜNTRUP AND LUDWIG JASKOLLA, Eds. New York: Oxford University Press, 2017, 414 pp., \$78.00 doi:10.1017/S0012217317000786

"Panpsychism is as old as philosophy itself" write Godehard Brüntrup and Ludwig Jaskolla to open this volume. Old it may be, but it is also new: in the last two decades, it has received an unexpected upsurge in serious attention from analytic philosophers, and this collection of essays provides an excellent overview of what drives this resurgence and what philosophers interested in panpsychism are currently talking about.

Sections 1 ("The Logical Place of Panpsychism") and 4 ("Panpsychism and its Alternatives") focus on situating panpsychism relative to rival views. Here an interesting tension emerges between two ways of defining the term, one reflecting the sort of panpsychism that is 'as old as philosophy itself,' and one reflecting specific contemporary interests. Consider, for example, the illuminating papers contrasting panpsychism with other views: panprotopsychism (David Chalmers' paper), physicalism (Brian McLaughlin's paper), emergentism (Achim Stephan's paper), neutral monism (Leopold Steubenberg's paper), dualism (Charles Taliaferro's paper), and idealism (Uwe Meixner's paper).

This roster of alternatives, however, is odd given the way most authors define panpsychism: as something like 'some or all fundamental physical entities are conscious' (Chalmers on p. 19, Nagasawa and Wager on p. 113, Brogaard on p. 130, Montero on p. 215, Goff on p. 283, and others). Physicalism, dualism, and their ilk are primarily claims about which properties ground which others. Panpsychism looks like a claim about *where* certain properties are instantiated. Shouldn't its rivals be other answers to that same question, like 'only human beings are conscious,' or 'only animals with brains are conscious,' or 'only living organisms are conscious'? Although these views